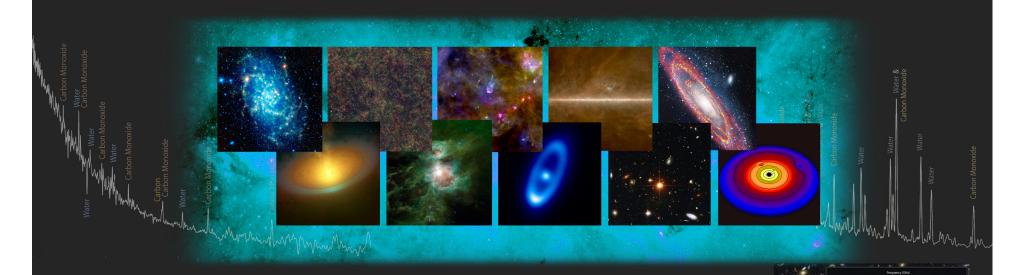
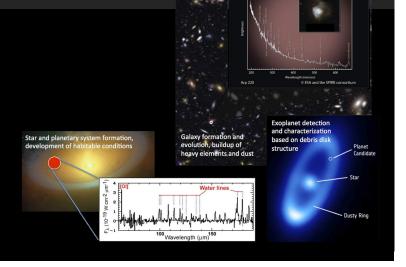
Bringing Fundamental Astrophysical Processes Into Focus: A Community Workshop to Plan the Future of Far-Infrared Space Astrophysics





Orientation, Logistics, and Introductory Remarks (abridged version)

Dave Leisawitz NASA/GSFC



Why are we here?



The objectives of the workshop are to:

- summarize recent successes in science and technology,
- identify the most pressing science questions that a far-IR space mission is best placed to answer,
- inform the community about technical and programmatic status and optional future directions, and
- renew consensus regarding the future of far-IR space astrophysics.

Energize the community by:

- building awareness of the importance of far-IR astrophysics in the broader context of multi-wavelength astronomy, and
- engaging early-career scientists and technologists in the discussion.



Goals for Day 1



- Where are we now, and where does the science suggest we should go next?
- What are the key measurement capabilities that will enable us to take the next big step?
- How do these capabilities compare with those available elsewhere in the electromagnetic spectrum?
- Discuss the status of critical enabling technology and plans for technology maturation.



Goals for Day 2



- Identify science "killer apps."
- What are the new ideas?
- Assess the opportunity landscape.
- Identify key decision points and open issues.
- Decide the approach we'll take as a community to choose between alternative future paths.

Goddad Space Flight Center

The Sweet Spot



Compelling science case, with broad base of support in the community

Technical feasibility

Public interest

Affordability in the next decade

Expensive (Decadal) missions only happen if they live here

- Lee Armus, Spitzer Science Center, Caltech
- Daniela Calzetti, University of Massachusetts, Amherst
- Jackie Fischer, Naval Research Laboratory
- Paul Goldsmith, Jet Propulsion Laboratory, Caltech
- Meredith Hughes, Wesleyan University
- Dave Leisawitz, NASA Goddard Space Flight Center
- Hiroshi Matsuo, National Astronomical Observatory of Japan
- Phil Mauskopf, Arizona State University
- David Neufeld, Johns Hopkins University
- Isa Oliveira, Observatorio Nacional, Brazil
- Debbie Padgett, NASA Goddard Space Flight Center
- Alexandra Pope, University of Massachusetts, Amherst
- Stephen Rinehart, NASA Goddard Space Flight Center
- Giorgio Savini, University College London
- Kartik Sheth, National Radio Astronomy Observatory
- JD Smith, University of Toledo
- Alycia Weinberger, Carnegie Institution of Washington
- Mike Werner, Jet Propulsion Laboratory, Caltech
- Jonas Zmuidzinas, Jet Propulsion Laboratory, Caltech

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